



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,426	06/10/2005	Kazuhiro Yagishita	CU-4247 RJS	3191

26530 7590 12/10/2007  
LADAS & PARRY LLP  
224 SOUTH MICHIGAN AVENUE  
SUITE 1600  
CHICAGO, IL 60604

EXAMINER
----------

GOLOBOY, JAMES C

ART UNIT	PAPER NUMBER
----------	--------------

1797

MAIL DATE	DELIVERY MODE
-----------	---------------

12/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/538,426	YAGISHITA, KAZUHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	James Goloboy	1797	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Applicant's arguments filed 9/20/07 persuasively argue that the salicylate detergent of Campbell does not have the same structure as the claimed detergent. The double patenting rejections in the previous office action have been overcome by applicant's terminal disclaimers filed 9/20/07. A new grounds of rejection are set forth below. The rejection over Carrick in view of Chambard has been maintained and also newly applied to several claims.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 1, 3-8, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrick (U.S. PG Pub. No. 2004/0102335) in view of Katafuchi (U.S. Pat. No. 6,159,911).

Carrick, in paragraphs 9-14, discloses a lubricating composition comprising a lubricating oil, as recited in claim 7, and a detergent mixture comprising a metal sulfonate, a metal salixarate, a metal saligenin, and an additional dispersant. The sulfonate, salixarate, and saligenin detergents meet the limitations of component (B) of claim 1, and the sulfonate also meets claim 5. In paragraphs 83 and 88-89, Carrick discloses that the additional detergent can be an overbased metal salicylate. In paragraphs 15-19 Carrick discloses that the composition further includes an antiwear agent, and an antioxidant, as in claims 6 and 10, and also a dispersant which is preferably ashless (paragraphs 110, 115), also as in claims 6 and 10. In paragraphs 1 and 131 Carrick teaches that the compositions are particularly effective in internal

combustion engines, including diesel engines. While Carrick discloses that the composition can contain a metal salicylate detergent, Carrick does not disclose the specific metal salicylate of claim 1.

In column 1 lines 5-8, Katafuchi discloses a diesel engine oil composition, and in column 2 lines 55-58 teaches that an alkaline earth metal salicylate is preferred as the detergent. In column 3 lines 18-27, Katafuchi discloses that the salicylates are derived from alkylsalicylic acids containing either one or two alkyl groups containing 8 to 18 carbon atoms, and provides specific examples, meeting the limitations of component (A) of claim 1. When an acid with two alkyl groups is used, the length of the alkyl groups of Katafuchi overlaps the range recited in claim 3. In column 3 lines 33-37 Katafuchi discloses that the detergent is present in an amount of 5 to 40% by weight, and the metal concentration will therefore overlap the range recited for component (A) of claim 1. In column 2 lines 59-67, Katafuchi discloses that the detergent preferably has a total base number (TBN) of 100-600, which implies a range of metal ratios falling within the range recited in claim 4. The composition must be prepared by incorporating the additives into the base oil, as recited in claims 8 and 11.

It would have been obvious to one of ordinary skill in the art to use the salicylate detergent of Katafuchi as the salicylate detergent in the composition of Carrick, as Katafuchi teaches that they are suitable salicylate detergents for diesel engine lubricating compositions.

3. Claims 1-2, 4-8, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrick in view of Chambard.

The discussion of Carrick in paragraph 10 above is incorporated here by reference. Carrick discloses a composition containing a salicylate detergent and another detergent, but does not disclose the structure of the salicylate detergent.

In paragraphs 8-11, Chambard discloses a lubricating composition comprising an overbased detergent, which is used for a diesel engine. In paragraphs 36-52 Chambard describes the overbased detergent. In paragraph 52 Chambard discloses that the preferred detergent is calcium salicylate. In paragraph 50 Chambard discloses that the alkyl groups of an alkylsalicylate advantageously contain 5 to 100 carbon atoms, and that when two alkyl groups are present, the average number of carbon atoms in the alkyl groups is at least 9. Based on this teaching, it would be obvious to one of ordinary skill that when  $R^1$  is a smaller alkyl group (5-9 carbon atoms),  $R^2$  should be a larger alkyl group (10 or more carbon atoms. Similarly, when  $R^1$  is a larger alkyl group,  $R^2$  can be a smaller alkyl group. Therefore, the salicylate of claims 2 is rendered obvious by Chambard. In paragraph 43, Chambard discloses that the overbased detergents more preferably have a TBN in the range of 160 to 400. Since a TBN of 0 indicates a metal ratio of 1, detergents having the TBN range taught by Chambard have a metal ratio overlapping or falling within the range recited in claim 4. The use of the salicylates of Chambard as the salicylates of Carrick therefore meets the limitations of claims 1-2, 4-7, and 10. The composition must be prepared by incorporating the additives into the base oil, as recited in claims 8 and 11.

It would have been obvious to one of ordinary skill in the art to use the salicylates of Chambard as the salicylates of Carrick, as Chambard teaches that they are oil-soluble salicylates, and useful when the lubricating composition is used for a marine diesel engine.

4. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrick in view of Tamoto (U.S. Pat. No. 5,458,807).

The discussion of Carrick in paragraph 10 above is incorporated here by reference. Carrick discloses a composition containing a salicylate detergent and another detergent, but does not disclose the structure of the salicylate detergent.

In column 1 lines 9-13, Tamoto discloses an engine oil composition. From column 2 line 66 through column 3 line 17, Tamoto discloses that the composition preferably contains a metal salicylate, which can have 1 to 4 alkyl groups of 1 to 30 carbon atoms each. The metal salicylate of Tamoto therefore encompasses the metal salicylates of claims 1-3 and 9, and the use of the salicylates of Tamoto as the salicylates of Carrick meets the limitations of claims 1-3, 5-7, and 9-10. The composition must be prepared by incorporating the additives into the base oil, as recited in claims 8 and 11.

It would have been obvious to one of ordinary skill in the art to use the salicylates of Tamoto as the salicylates of Carrick, as Chambard teaches that they are oil-soluble salicylates, and useful engine oil additives.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*James C. Goloboy*  
JCG

  
Glenn Caldarola  
Supervisory Patent Examiner  
Technology Center 1700